

Claims

1. A device for adjusting an optical mirror (33), having a mirror holder (36) that
5 receives the mirror (33) and is retained on a holder profile section (40), and having
three adjusting pins (37), which pass through through holes (42), offset from one
another in the circumferential direction in the mirror holder (36), and which are
axially adjustable relative to the mirror holder (36) and are braced by their base
points (371) on buttresses (43) embodied on the holder profile section (40),
10 characterized in that the buttresses (43) are embodied such that on the one hand,
the buttresses (43) center the mirror holder (36) via the adjusting pins (37), and on
the other, at least two buttresses (43) allow the base point (371) of the respective
adjusting pin (37) to shift radially outward.

15 2. The device according to claim 1, characterized in that one buttress (43) is
embodied as a blind bore (45), and one buttress (43) is embodied as a radial
longitudinal groove (46), and the third buttress (43) is formed by a flat face (401).

20 3. The device according to claim 1, characterized in that one buttress (43) is
embodied as a blind bore (45), and the two other buttresses are each embodied
as a radial longitudinal groove (46).

4. The device according to claim 1, characterized in that all the buttresses (43)
are embodied as radial longitudinal grooves (46).

25 5. The device according to one of claims 2 through 4, characterized in that the
inside diameter of the blind bore (45) and/or the width of the radial longitudinal
groove (46) is dimensioned such that the base point (371) of the adjusting pin (37)
is received in the blind bore (45) or in the radial longitudinal groove (46),

respectively, in the circumferential direction with slight play in each case.

6. The device according to one of claims 2 through 5, characterized in that the base regions of the adjusting pins (37) are embodied in domelike or conical form and rest on a preferably chamfered peripheral region of the blind bores (45) and/or of the radial longitudinal grooves (46).

7. The device according to one of claims 1 through 6, characterized in that the adjusting pins (37) are embodied as threaded pins, and the through holes are embodied as threaded bores (42); and the threads mesh with one another without play.

8. The device according to claim 7, characterized in that the thread of the adjusting pins (37) and/or the thread of the threaded bores (42) is coated with plastic.

9. The device according to claim 7, characterized in that the thread of the adjusting pins (37) is embodied as self-forming.

10. The device according to claim 7, characterized in that the adjusting pins (37) are acted upon with a radial pressure force by a spring element (47) resting on all the adjusting pins (37).

11. The device according to claim 10, characterized in that the spring element (47) is a snap ring (48), which spreads apart under initial tension and which rests inside the pitch circle (55) defined by the adjusting pins (37) and acts upon the adjusting pins (37) with a radially outward- oriented pressure force.

12. The device according to claim 11, characterized in that the snap ring (48)

has a twist preventer (49).

13. The device according to claim 7, characterized in that one spring element (54) engages each adjusting pin (37) with radially oriented pressure force.

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14. The device according to claim 13 characterized in that the spring element (54) is embodied as an axially slit clamping sleeve (51), which is inserted into a receiving hole (53) made in the mirror holder (36); and the receiving hole (53) has a radial spacing from the threaded bore (42) such that the clamping sleeve (51) presses radially against the adjusting pin (37).

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15. The device according to one of claims 1 through 14, characterized by its use in an optical measuring instrument for contactless distance measurement, preferably in a laser distance meter embodied as a handheld device.

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16. A measuring instrument for contactless distance measurement, in particular in the form of a laser distance meter embodied as a handheld device, having an optical transmission path (12) for transmitting an optical measurement signal and an optical reception path (13) for receiving the reflected measurement signal, and having at least one deflection mirror (28, 33), located in one of the optical paths (12, 13), for folding the optical axis (121, 131) of the optical path (12, 13), characterized by an adjusting device (35) according to one of claims 1 through 14 that is associated with the deflection mirror (28, 33).

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